BRAP Fact Sheet

South Carolina's Business RECYCLING Assistance Program

# Waste Reduction and Recycling for Hospitals and Health Care Facilities

Hospitals and health care facilities generate waste like other businesses. The type of waste, however, varies greatly from other businesses.

Much like banks, real estate companies, customer service centers and other commercial entities, paper products are a large percentage of a health care facility's waste stream. But there are a myriad of other waste items that with proper planning can be minimized or recycled to reduce a health care facility's overall waste management costs.

Like any successful commercial waste reduction and recycling program, the building blocks are similar:

- Securing management support;
- Developing a team made up of representatives from various departments;
- Measuring what and how much material is being disposed;
- Reviewing purchasing habits as a means of reducing waste;
- Identifying opportunities to prevent waste and recycle;
- Securing markets for collected materials;
- Educating staff on how to participate as well as why it's important; and
- Keeping track of your program's progress.

There are numerous materials that can be reused or recycled by health care facilities. It's best to start with some basic materials that are easy to market and add materials as your program matures. This also allows your facility to build on some early successes rather than trying to tackle your most difficult materials first.

## Recyclables to Consider...

**PAPER AND CARDBOARD:** Paper and corrugated cardboard are two of the biggest waste streams generated by hospitals and health care facilities. Patient files, insurance forms, office correspondence, magazines and newspapers can create large amounts of waste that can be recycled. Much of the paper available for recycling (patient files, insurance forms and such) must be handled in a manner to protect patient confidentiality. Lexington Medical Center (see reverse page) uses secure 96-gallon containers to collect paper and has made arrangements with its recycling vendor to ensure privacy. Other options include shredding paper to ensure patient privacy.

Many markets exist for paper and cardboard in South Carolina. Recycling these items not only reduces disposal costs, but it also may generate revenue. In some cases, if your paper and cardboard volumes are significant, usually eight-to-10 tons a month, recovered paper manufacturers will supply a baler to assist with your recycling efforts.

In addition to locating collection bins in your administrative areas, you may want to consider placing some mixed paper bins in waiting rooms, cafeterias and canteens, and other high-traffic areas to collect newspapers from visitors.

**STEEL AND ALUMINUM CANS:** Cafeterias and canteens generate an enormous amount of steel and aluminum cans that also are recycled easily. Simply rinsing and crushing them to save space during storage are all that is required. In addition to locating collection bins in your cafeteria or canteen areas, you may want to locate convenient receptacles in waiting rooms to collect beverage containers. Aerosol and paint cans also are prevalent in hospital settings and can be included in the recycling program.

**FOOD WASTE:** Food waste is another large waste stream in health care facilities and one that can be drastically

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***FOR A MORE COMPREHENSIVE LOOK AT HOW YOUR HOSPITAL CAN REDUCE WASTE,*** *check out the American Hospital Association's "Hospital Waste Reduction Planning and Recycling" at* ***www.aha.org*** *and select the Resource Center and then Online Catalogue for more information about ordering a copy.*

reduced through composting. By composting food waste, the facility not only reduces its disposal expenses, but also can provide a valuable, nutrient-rich product for its landscaping needs – and perhaps save more money. Almost all types of food waste can be composted, with the exception of meat, grease and bones.

Kitchen grease should be collected for recycling rather than poured down kitchen drains. Pouring grease down drains can harm wastewater by increasing the amount of Biochemical Oxygen Demand (BOD). Wastewater treatment permits usually set limits on BOD discharges. There are companies in South Carolina that provide recycling services for kitchen grease.

**PLASTICS:** There are numerous types of plastic containers and products used in health care settings. Perseverance and creativity are key in reducing the amount being disposed. Determining what types of plastics you are generating and how much of each type will enable you to negotiate with plastic recycling markets. But due to its lightweight nature, it takes a large amount of material to generate the weight required by pricing.

You may want to consider purchasing plastic products that can be reused again and again rather than buying disposable products. In some instances, this may not be practical because of health and safety concerns, but implementing reusable items whenever possible can reduce the volume of plastics being thrown away.

**BATTERIES:** Numerous types of batteries are generated by health care facilities, including nickel-cadmium, alkaline, lead-acid, mercury-aide, lithium, silver-oxide and zinc-air batteries. They contain potentially toxic metals, such as lead, mercury and cadmium. Disposing of batteries can pose serious threat to air quality and groundwater. Regulated as a universal waste, recycling batteries makes better economic sense than disposing them as expensive hazardous waste.

In order to maximize your facility's battery collection program, look into developing a battery exchange program that requires employees to return old batteries for recycling before issuing new batteries.

**OTHER WASTES:** There are numerous other wastes generated by health care facilities that require special collection and disposal methods. Infectious waste, numerous chemicals and pharmaceuticals, X-ray film and solutions, and outdated medical equipment are just some of the special wastes that require more stringent disposal methods and alternatives. With careful planning and the desire to reduce waste disposal, many of these items can be reused or recycled.

## *Lexington Medical Center's Recycling Program is the Perfect Example*

Lexington Medical Center's (LMC) waste reduction and recycling program has paid dividends – both for its bottom line and the environment.

LMC did things right from the beginning. Top management encouraged and backed the development of the recycling program. A waste audit was conducted to see what could be recycled. Educational programs were offered at each department, at employee orientations and at its annual Health and Safety Fair. Staff was trained on how to recycle and why recycling was important.

Kicked off on Earth Day 1993, the program began by collecting various grades of office paper, cardboard, glass, aluminum and steel cans. The program has grown and changed over the years – based on lagging markets and new needs – to include batteries, printer cartridges, pallets, fluorescent bulbs and kitchen grease.

LMC's recycling program is no small undertaking. It includes the hospital's main campus, a 300-bed facility, 29 physician practices, seven community medical centers, 4,000 employees and hundreds of patients coming and going every day.

But the facility went beyond recycling. LMC also looked into reducing waste and reusing materials whenever possible. The facility, for example, switched from cardboard containers used for disposing medical waste to buying reusable plastic containers. LMC also customized surgical kits to reduce throwing away unused instruments. Overall, many of the hospital's supplies now come in cardboard containers that can be converted to file boxes.

Successful? Absolutely. LMC reduced the number of trash pulls from three to just two per week saving not only disposal costs but also valuable landfill space. In the nine months of 2002, LMC recycled nearly 172 tons of paper and cardboard. And not only did LMC save nearly $10,000 in disposal costs, but generated more than $2,000 for its employee emergency fund (and nearly $48,000 during the life of the recycling program).

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***The Business Recycling Assistance Program*** *is a partnership of the S.C. Recycling Market Development Advisory Council and the S.C. Department of Health and Environmental Control's Center for Waste Minimization and the Office of Solid Waste Reduction and Recycling. Its mission is to provide technical assistance opportunities for* ***waste reduction, recycling, buying recycled and recycling market development*** *to businesses and industries. For more information, contact us at* ***1-800-768-7348*** *or visit our Web site at* ***http://www.scdhec.net/brap****. You may also contact Karen Owens, Business Recycling Assistance Program project manager, at* ***(803) 737-0239****.*

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